

## **GOLF CLUB HEAD DIAPHRAGM**

### **FIELD OF THE INVENTION**

The present invention relates to a golf club head and principally to, but not limited to, wood type clubs. More specifically, it relates to an improved golf club head with a device installed inside the cavity of the golf club head to increase the rebounding force of golf club head face.

### **BACKGROUND OF THE INVENTION**

Traditionally, the golf club head of wood type club is made out of wood. Currently, it is made of different kinds of metals. To compensate for the heavy weight of the metals, the golf club head has a hollow cavity inside. Because of the hollow cavity, as golfers hit the ball, the face of the golf club head slightly deforms by bending inwards. Shortly after the face is deformed, the face returns to its original shape. By providing a device designed to provide additional force when the face is returning to normal, the golfers will be able to hit the ball farther than without such device.

### **SUMMARY OF THE INVENTION**

The main objective of the present invention is to provide golfers with an improved golf club head that will provide additional rebounding force of the golf club head face so that the ball can be hit farther and accurately.

The foregoing objectives can be accomplished by putting a device which is designed to provide additional force when the golf club head face is returning to its original shape. Present invention is to put at least one diaphragm which divides the golf club head cavity and/or putting various kinds of gases or liquids inside the cavity of the golf club head. By putting this device in, the golf club head face will return to its original shape more quickly and forcefully than a golf club head without this device because of the additional force provided by it.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 is a horizontal cross sectional view of a golf club head made according to a first form of the present invention taken as on line 1-1 in FIG. 2;

FIG. 2 is a vertical sectional view taken as on line 2-2 in FIG. 1;

FIG. 3 is a horizontal cross sectional view of a golf club head made according to claim 4 of the present invention;

FIG. 4 is a horizontal cross sectional view of a golf club head made according to claim 5 of the present invention;

FIG. 5 is a horizontal cross sectional view of a golf club head made according to claim 7 of the present invention;

FIG. 6 is a vertical sectional view of a golf club head made according to claim 9 of the present invention;

FIG. 7 is a horizontal cross sectional view of a golf club head made according to claim 3 and 8 of the present invention;

FIG. 8 is a vertical sectional view of a golf club head made according to claim 3 and 8 of the present invention;

FIG. 9 is a horizontal cross sectional view of a golf club head made according to claim 12.

FIG. 10 is a horizontal cross sectional view of a golf club head made according to claim 6.

FIG. 11 is a horizontal cross sectional view of a golf club head made according to claim 10.

## **DETAILED DESCRIPTION**

The golf club head face 10 deforms when the golfers hit the ball. The golf club head diaphragm 13 and/or various gases, compound gases or liquids put into the golf club head cavity 15 or the space 12 between the inner wall of the golf club head 11 and the golf club head diaphragm 13 would give the golf club head face 10 additional forces when it returns to the original shape. The golf club head diaphragm 13 can be made of metal, stainless steel, titanium, aluminum, or plastics, etc. The golf club head diaphragm 13 could have at least one hole 14 in it.

## **CLAIMS**

I claim :

1. In a golf club head, the improvement comprising:

a planar diaphragm, and

means to install said diaphragm inside of said golf club head.